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PRESIDENT'S MESSAGE

BY FRANK W. EDWARDS

FUNCTIONAL ORGANIZATION OF THE ENGINEERING PROFESSION

*Note: Based on a talk presented before Illinois Section,
ASCE in Chicago, June 20, 1958.*

A strong profession must have a strong professional society!

To be strong, a professional society must be organized to cope with important professional problems effectively and often quickly!

To cope with professional problems effectively, the society must be well administered and have an informed membership!

Using the words of a famous document, "We hold these truths to be self-evident." Now let us examine the situation.

In 1852 the American Society of Civil Engineers was founded. Civil at that time meant civilian. The society was formed to promote the interest of civilian engineers as contrasted with military engineers the only other classification at the time. Unity was not a problem in 1852.

We all know what has happened since; first, the mining engineers; next, the mechanical engineers; then, electrical engineers and finally chemical engineers in the engineering profession organized their individual national societies. All have expended their primary efforts in the technical field.

Finally it became evident that united effort was needed in professional matters. As a result in 1932 the Engineers Council for Professional Development was founded. It was and is a council made up of representatives appointed from the societies mentioned plus American Society for Engineering Education, American Institute of Canada and National Council of State Boards of Engineering Examiners. ECPD has concerned itself with and is known principally for its program of accreditation for engineering colleges.

(Continued on Page 2)

YOUR DIRECTORS REPORT

The 24th annual meeting of the National Society of Professional Engineers was held in St. Louis on June 11 to 14th at the Chase-Park Plaza Hotel.

Nearly forty registered from Illinois and the St. Clair Chapter very generously reserved a hospitality room at the Chase Hotel for Illinois members. The total registration for the Convention was over 500. The Missouri Society proved themselves good hosts, and had an excellent exhibit center at the Hotel of interest to most engineers. Their ladies program was a feature of the convention enjoyed by the many wives of members who accompanied their husbands.

President Frank Edwards and his wife, and Secretary-Treasurer J. P. Murphy and his wife were at the Convention. All three of the elected Board Members—M. E. Amstutz, R. A. Brown and C. J. McLean were present and represented the Society at the meetings of the Board.

The Board of Directors considered many items of interest on Saturday, June 14. The more important subjects of interest to the State Society and to local chapters included the following:

The subject of using engineering technicians to aid professional engineers had been thoroughly discussed at a general meeting on Friday, and the committee report indicated that study is continuing on the relation of these technicians to the professional society.

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PRESIDENT'S MESSAGE (Cont'd)

In 1934 a new concept in engineering society organization was introduced. Four state societies of engineers became charter members of the National Society of Professional Engineers. Membership in NSPE was restricted to professional engineers licensed to practice in their respective states. Illinois became the fifth member state society later that year. A prime incentive for organization of NSPE was the Wagner Act which lumped engineers with laborers for collective bargaining purposes. Devoted exclusively to professional, legislative and economic matters NSPE now has 46 member societies with nearly 50,000 individual dues paying members, all legally qualified to practice professional engineering.

In 1945 Engineers Joint Council, which was an outgrowth of occasional meetings of presidents and executive secretaries of the so-called founder societies, was organized formally. In 1952 this council was expanded to include other technical and semi-technical organizations.

In the meantime over 100 other national engineering societies have made their appearance on the scene.

Numerous attempts have been made in recent years to create a unity organization which can represent all engineers in both technical and professional matters. Over a year ago the American Institute of Electrical Engineers proposed a plan which approaches that ideal. Essentially the plan proposes to recognize EJC as the organization to coordinate all technical activities of the societies represented on its council, and to recognize ECPD as the organization to coordinate all educational matters, while NSPE would represent all branches of the profession in the professional, economic and civic matters.

This plan recognizes that delegation of authority is required in order for a profession to be effective. Delegation of authority in coordinating technical matters, however, may require less close control by the members of the profession than delegation of authority in coordinating professional matters. In the one case relatively consistent materials and laws of nature are involved, in the other the variables of human relationships.

NSPE with its local chapters, state societies and national organization can function effectively at all three of these levels. There is a direct line of authority from the individual member to the national board, a circumstance which does not exist in Engineers Joint Council. In fact during meetings of EJC last year it is understood that of the 28 to 30 representatives in attendance, not more than half a dozen resided farther than 200 miles from New York.

Adoption of the AIEE plan would eliminate duplication of activities with accompanying waste of funds and human energy. EJC would withdraw from such activities as salary surveys, legislative problems, employment practices and other similar matters. These would be

MEMBERSHIP DRIVE

Harold Sommerschild, Chairman of the State Membership Committee, reported to the ISPE Board of Direction at their June 7 meeting that he had been receiving enthusiastic cooperation from chapters throughout the Society. He reiterated his belief that the Society membership can and will be increased by a full 2,000 members this year. Sommerschild then presented the results of a study made by his committee on the probable number of new registrants who would be licensed as Engineers in Training (600), Professional Engineers and Structural Engineers (360), Land Surveyors (300) during the remainder of 1958.

Following further discussion of this plan, the motion was made by Sommerschild and seconded by Wurtz that all future 1958 Illinois Engineer in Training, Professional Engineer, Structural Engineer and Land Surveyor registrants be given membership in I.S.P.E. with dues waived for 1958. The grade of membership assigned shall be the highest grade for which the registrant is qualified.

During the discussion of the motion, Sommerschild explained that if the plan were adopted, an appropriate letter will be drafted and mailed to each applicant along with an application blank. He also explained that at the end of 1958 each new member would be sent a statement for dues for 1959 and that E.I.T. members and members who qualify for National grade would be transferred to National when and if the 1959 dues were paid.

John Housiaux stated that such a plan had been discussed in Central Illinois Chapter and was strongly favored by the Chapter. Pres. Edwards stated that a similar program was being currently considered in Indiana. R. A. Brown stressed the need for Chapter level follow-up if such a plan were adopted. Sommerschild acknowledged this need.

The motion was passed, bringing this introductory membership plan into reality for I.S.P.E.

handled exclusively by NSPE whose policies are under the direct control of its members. NSPE would withdraw from education, which would be transferred to ECPD where as other similar activities would be transferred to EJC.

A strong profession must have a strong professional society. The AIEE proposal suggests a functional organization for the profession. It falls short of the one society concept, but it does, however, propose delegation of authority in professional matters to one organization which is more closely controlled by its members than the federation type of profession. It, therefore, should strengthen the profession in this area of activity.

NSPE endorsed the plan at its annual meeting in St. Louis last month.

DIRECTORS' REPORT (Cont'd)

The *American Engineer* Committee recommended that a larger portion of the dues be allocated to the magazine in order to maintain its high standard of quality and improve its value to the members. This was approved and the price of the magazine to nonmembers was increased.

The Employment Practices Committee recommended the publication of a text book on professionalism and presented the outline of such a text. This was approved by the Board.

The Ethical Practices Committee report was discussed at some length as this concerns all professional engineers in all States. A definition of "competitive bidding" as a guide to ethical procedure was approved.

This Membership Committee Report was the subject of considerable discussion. The "Texas" plan of admitting E-I-T members to the State Society for the balance of the the current year received general approval. Paul Robbins cautioned however, that this should not be considered a free membership but rather referred to as an introductory membership. It was concluded that such introductory memberships for both E-I-T and P.E. members if approved by the State Society could include national membership as well, if so reported separately to the National Office. Such national membership would include the *American Engineer* until the following April issue and the annual report. Memberships not renewed by April would be dropped in May.

Past President Clarence T. Shoch reported on the Committee Structure Study. The duties of the President now make such demands on the time of the engineer elected to this office that the committee recommended that vice presidents and other officers assume more active roles in visits to chapters and regional meetings, relieving the time of the president for attending functions of a greater national importance. The discussion of this important matter resulted in the adoption of the committees recommendation as a tentative policy with final action delayed until the next meeting of the Board.

The report of the Tellers Committee revealed that Clark A. Dunn had been elected the President of NSPE for the year 1958-1959. Mr. L. Eugene Easley of Indianapolis was elected vice president from the Central Area which includes Illinois.

The meeting adjourned at 4:45 p.m. after a very exhaustive day. The Board of Direction of NSPE is composed of very high caliber men who take their responsibility seriously and work hard at their duties on Committees and at the Board Meetings.

C. J. McLEAN, Director
NSPE Board

Testimonial Luncheon for Spencer T. Anderson June 3

Spencer T. Anderson, utilities director for the City Water, Light & Power Department of Springfield was honored at a testimonial luncheon on June 3. "Andy," a past-president of the Capital Chapter, has been an employee of the City of Springfield continuously since September 1, 1926. For almost 32 years, he has devoted his time, services and exceptional ability in helping to develop Lake Springfield from a dream to a reality and in helping the growth of that city's water and electric utilities from small, struggling units to one of the larger industries in the community.

In the resolution citing Anderson for his outstanding service, June 3rd was proclaimed "Andy Anderson Day" by the Mayor and Council of Springfield.

Anderson began his career with the City Water, Light & Power Department when he was appointed assistant general superintendent. His appointment followed a period of early struggle to establish the right of the municipal utility to sell electricity for commercial purposes. Following the United States Supreme Court decision written by the Late Justice Oliver Wendell Holmes, November 7, 1921, giving the city unquestioned right to enter the commercial field, the city electric plant grew rapidly. Anderson was instrumental in pioneering these expansions. He was also in charge of construction of the expanding municipal water system.

Following a crusade for more adequate water supply and subsequent approval by the voters for the construction of Lake Springfield in 1930, "Andy" assumed new responsibilities. He was in charge of building new highways, two large bridges, two dams, a pumping station, a new power plant and filter plant, beach, beach-house and sewer system.

In 1938, Andy was promoted to general superintendent and in 1955, his title was changed to utilities director. From 1938 to the present time, he has been in charge of the operation, maintenance and construction of all city water, light and power department operations, with a gross income today of approximately \$5 million.

Recently, Mr. Anderson supervised construction of a new \$2,900,000 transmission and distribution system. He is now in charge of planning the \$7,200,000 power plant expansion which is due for completion in 1960.

Adding to the long list of Anderson's accomplishments is his recent election to the presidency of the American Public Power Association, a national organization representing more than 800 publicly owned electric utilities in 30 states, Puerto Rico and Alaska.

Attending the testimonial luncheon were a number of members, including Clarence W. Klassen, Chief Engineer, State of Illinois, Department of Public Health, Division of Sanitary Engineering. ISPE Past President Klassen was a member of the committee which arranged "Andy Anderson Day."

ETHICS IN DENTAL PRACTICE

BY MARVIN S. WALDMAN, D.D.S.

EDITOR'S NOTE—At the Chicago Chapter's weekly luncheon meeting, May 26, members heard a talk by Stanley G. Tylman, D.D.S., professor at the University of Illinois College of Dentistry. His subject was "How Professional Attitudes are Taught Dental Students at the University of Illinois." After Dr. Tylman spoke about the close relationship between the dental and engineering professions, he pointed out that a student paper would reflect the result of how professional concepts are taught the students better than anything he could say. He presented the following paper, "Ethics in Dental Practice," written by one of his students. He explained to the group that each student in the College of Dentistry must write a paper on this subject in his senior year and this one was judged to be among the best.

Last month the author received the degree of Doctor of Dental Surgery from the University of Illinois.

Just before we released the material to the printer of the ILLINOIS ENGINEER, Dr. Waldman telephoned and said that the editor of *Dental Review* had requested permission to publish his paper. He then requested our permission for this publication.

"Character, Knowledge, and Skill are the predominating ingredients necessary to produce a professional dentist. An individual who has acquired Knowledge, developed Skill, but is deficient in Character is one unworthy of being honored with the responsibilities he has to his patients, his family, the dental profession, and himself."¹

The purpose of this paper is to present those principles of ethics which must be utilized by the professional dentist in order that his obligations and responsibilities may best be realized.

In 1840, dentistry was elevated to the status of a profession in the United States, for during the years 1939-40 the triumvirate of a profession were established in dentistry. They were: a school devoted to education in the field of dentistry (Baltimore College of Dental Surgery), a national publication (*The American Journal of Dental Science*), and an organized society (The American Society of Dental Surgeons).² Prior to this time, professional morals and ethics depended solely upon the character of the practitioner.

In a lecture given at McGill University in 1910, Dr. William Hunter of England stated, "... American dentists generated more pathology than they cured."³ The effect of this initial condemnation of the dental profession, and the public criticism which ensued, led to an extensive reorganization of the dental curriculum.

Throughout the years 1910-29, the following significant advances were made by the profession: elevation of the quality of service its practitioners performed for

the public, increase of its educational standards (minimal educational requirement of two years of pre-dental studies and four years in a dental college), and advancement of graduate studies and research in the various dental fields.

In the period from 1929 to the present, concentrated efforts have been directed toward the fields of research, public health dentistry and, in general, providing methods and means by which the dental needs of the greater segment of the population can be served.⁴

The profession of dentistry can rightfully be proud of the major advances it has made along the aforementioned paths. Considering the leadership presently found within its ranks, much can be expected in the future.

Ethics and Morals

Ethics is the study of man's moral behavior. The concept of ethics and morals in man was the subject of special consideration by Socrates, Plato, and Aristotle. How did the writings of centuries ago withstand the crushing evolution of an everchanging social and economic world? The answer lies in the spirit of the moral relations of man and not in the letter of the obligation. Thus, as each and every "new world of man" is erected, a seemingly new moral and ethical code may evolve to coincide with the needs of the existing society. What actually ensues is a remodeling of the exterior, while the crux, the very foundation of man's relations with himself, the Golden Rule, remains unchanged. Thus, it is evident that the ostensible means may vary, and yet the end realized is the same.

Morality is a virtue. It is not an inherent trait of the newborn. It is not gene-determined. If one considers the numerous, ever-evolving worlds of man, one finds three leading authorities which dictate the doctrines of man's moral and ethical behavior. These are the religious, political, and social sanctions.

The religious sanction bases morality on the authority of God and the Church. The political sanction is based on the power and authority of the state to decide by its laws what its citizens should or should not do. The social sanction is that exercised by society or one's social environment. Often all three of these sanctions influence the individual in his desire to conform to the laws of moral conduct.⁶

All Three Are Important

Since it is obvious that religion, society, and politics play major roles in molding our moral behavior, what then is it imperative that we have a code of ethics for dentistry? Firstly, the dentist is a professional being because of his extensive training in these fields which enable him to perform his special services and, his a

de is one of service before self. The lay-public does possess these qualifications. Therefore, the community places its faith and trust in an individual it believes will provide efficient and proper service because of his sense of ethical obligation.⁷ Secondly, optimal professional ethics are necessary because professional behavior cannot be carefully regulated or evaluated.⁸ Thus far, a brief history of the evolution of dentistry has been presented in regard to its educational requirements, its greater service to the public, i.e., public health dentistry and research in the various dental fields, and the need for a definite Dental Code of Ethics. That there is a need for the latter is present has been shown.

The major organization of the American dentist, on a national level, is the American Dental Association. The enlightenedness of this organization is apparent by the fact that it published its first code of ethics in 1886. As the evolution of the dental profession in the United States has taken place, so too have the Dental Code of Ethics evolved to aid in elevating the dignity and morals of our field. Since 1886 there have been six revisions of the code, the latest being in 1955.⁹ The necessity for the enlargement and expansion of the code is self-evident upon examination of the revisions. The present revision of the code contains twenty-one sections. These sections strive for the practice of honest and ethical dentistry in order to create an individual worthy of bearing the title Doctor of Dental Surgery.

Through patient investigation and study of the laws of Nature, scientific men have been able to induce a "controlled" evolution of diverse plants and animals into forms better suited to human uses. Similar research may lead to the evolution of a more socially, morally, and spiritually perfect man. Achievement of such an evolution will depend largely on the standards set for the society. In dentistry this achievement depends largely on the individual. The American Dental Association acts as an adjunct to assist one in the development of a higher professional and ethical level. In regards to the moral quality, it can be said that the *doing* of what is right, at present, lags behind the knowledge of what is right. In the event that such an optimal society develops, then each life would benefit from another. However, until such a society develops, the individual must do more and give more of himself than is expected of him, helping carry the burdens and perform the duties neglected by others. It is right for man to develop himself for his own good and welfare, but since he receives so much from others, his life should be aimed at providing for the good and welfare of others.¹⁰

Man's conscience is the voice of his religion, state, and society. The sense of duty in the dentist must stem not from what he wills to do but from what he ought to do. The will or inclination does not always coincide with the duty. Thus, a conflict arises and man's conscience is called forth to judge. Such conflicts are not alien to man, for it is only when his actions are

directed toward an end contrary to custom (or duty), that his conscience has something to say.

Good Habits Control Impulses

Through the formation of good habits of thought and conduct, man may educate himself to control his inclinations and impulses, resulting in less conflicts with duty. The scoundrel who has little or no regard for duty may accumulate great wealth and external happiness while the righteous individual may find survival difficult. In the case of the former, the fact that he attracts so much attention and arouses such indignation indicates that his is the exception rather than the rule. While material treasures have not been the lot of the latter, yet he is sure of finding happiness in his own heart. He can be certain that a well-merited reputation for honesty, integrity and professional ability carries with it its own rewards.¹¹

It may be generally stated that virtue tends to produce happiness, success and prosperity, however, these children of virtue may lead to the downfall of the parent from whence they came. Mankind must forever be on guard against the destruction or want of virtue.

What constitutes optimal dental service? The patient frequently states, "Doctor, do what you know is best for me."

In the business world the most important consideration of a transaction is that both parties involved derive the greatest benefits. A price is agreed upon and almost always this is followed by a transfer of materials or goods. The goal of the dentist is the achievement of the physical, mental and social well-being of all people. This is a human concern for human needs. The individual in seeking a particular practitioner has often done so because he has faith and trust in the character, knowledge and skill of the man. The welfare of the patient must be the prime consideration. The dentist does not sell a gold restoration or put a price on a removable partial denture. Instead, he provides the patient with a service—the most beneficial for that particular patient. It is the position of the dentist to make certain the patient derives the highest good and best care possible.

When asking a layman what he expects from his dentist, he will probably answer, "I would expect him to provide me with the best possible care at a fee within my means." These requirements would automatically come into his conscious mind. However, if he were to think further about this question, to probe into his subconscious mind, several other considerations would arise. He would ultimately realize that these latter considerations are in reality more important in his estimation of his dentist's qualities? For example, is his dentist patient, tolerant, and sympathetic? Does he have that quality of empathy which gives him a full appreciation of his patient's feelings, needs or fears? Does he honestly attempt to mitigate these fears, soothe these feelings, and appreciate these needs? Does he have the calm and quiet

mien of external placidness and internal peace which immediately instill confidence in a patient and give him the feeling that "everything will be all right?" Does he treat the patient as an equal rather than an unlettered underling? Does he refrain from making derogatory remarks concerning any previous dental work he finds in the patient's mouth? Most important can the patient think of him as a sincere, righteous and honest man of consummate moral worth? If all these questions can be answered affirmatively, then the patient is in the care of an ideal man and an ideal dentist. Indeed, the two latter ideals must be identical.

A Dentist and His Colleagues

A second question is, "What may a dentist expect of a fellow colleague?" Does he attempt to further the dental education of his patients and of the general public? Does he share his problems and solutions with his colleagues to the greater enhancement of his profession's body of knowledge? Does he actively support his local dental society and work for the betterment of his profession? Does he give all possible aid to his newly graduated colleagues to orient them to their new lives and to introduce them to bright futures by his aid, instruction and upright example? Does he refrain from voicing jealous criticism of a colleague's work in the presence of a patient? Does he ever strive to improve his techniques and extend his knowledge? Does he do everything possible to bring honor and dignity to himself and to the entire profession? Does he regard the ethical code of his profession not merely as a restrictive set of rules to be tolerated, but rather a guide to thought and action in and out of his office—a way of life which infuses his total being and molds his character during all his waking moments? If these questions can be answered affirmatively, we have a professional colleague who is an ideal man and an ideal dentist, again, a logical identity.

It is important that the dental student derive the fullest from the opportunities presented to him during his four years of formal dental education.

At the present time, an honor system is being utilized in four schools in the United States, one of which is the University of Illinois College of Dentistry. A combination honor-proctor system is also being used at four other dental schools.¹² The honor system refers to the every day relations of the student with his fellow classmates, his instructors, and his patients in his dental education.

Incorporated within the honor system at the University of Illinois is an honor code. This code of ethics was initiated and developed by the student body with the fullest cooperation of the faculty. It acts as a guide for maintaining an honest and morally high standard when taking examinations in didactic and technique courses and in providing for the optimal care of patients in the treatment clinics.

Process Is Gradual

Thus the student is able to glean a wealth of valuable knowledge during the years of his formal dental education. This is so because the student makes a gradual transition from layman to professional man. He is not a layman one day and a dentist the next. He is introduced into the profession as a semi-colleague rather than as a mere understudy. By means of the honor system he is also introduced to the principles of a self-governing body of ethical practice. Under such a unification of honor and education, the conscientious student can well prepare himself for his future years of ethical dental practice.

We of the dental profession must be cognizant of our past history, our present status, and our future potentialities, desires and motives for the maintenance of our profession at the proper level of dignity and respect it deserves. There is no room for complacency. Each man and woman must be fully aware of his and her responsibility as a member of the honored profession of dentistry. To have acquired knowledge and developed skill is not enough. One must have character.

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Chicago Chapter News

Ken Cook, Chairman of the Inspection Trips Committee, reports 17 reservations (cash on the barrel) already have been made for the September 6th boat trip. His committee suggests that you plan now for the cruise to Lake Michigan, south to the Calumet River and Chicago's port facilities at Lake Calumet, westward through the Cal-Sag Canal, and back through the Saginaw & Ship Canal to the Chicago River. It's a bargain—with breakfast and lunch aboard—for only \$6.50 per person.

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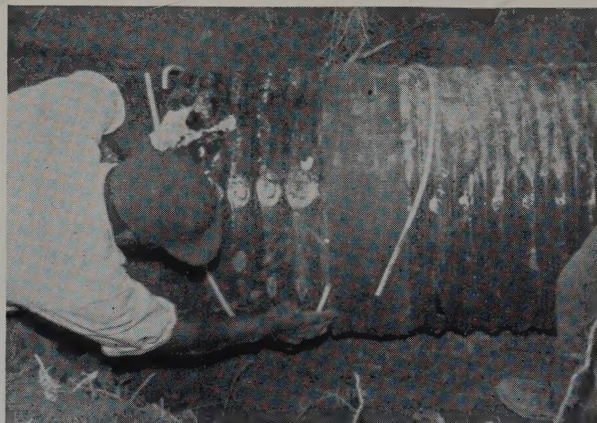
1:56 P.M. 20-foot length of Armco SMOOTH-FLO is lifted toward ditch.



1:58 P.M. pipe is lowered into ditch.



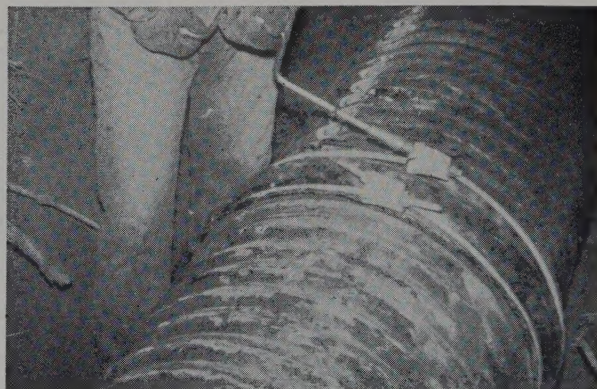
2:00 P.M. pipe is butted against section already in place.



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Amstutz Reports

National Director, Melvin E. Amstutz, reports on items of particular interest to ISPE from Annual Board Meeting in St. Louis.

Growth of the National Society: The total membership of NSPE is presently approximately 45,000; a gain of over 4,000 members since last year. Montana was the winner of the membership contest having made a net gain of 306.7 members per 1000 prospects; prospects being eligible registrants. Our own State had a net gain of 15.9 per 1000 eligible prospects; total prospects being 11,725. Although the net increase of over 4,000 during the year sounds very encouraging, it should be remembered that this represents less than 20 per cent of the additions to the profession based on engineering graduates and professional engineer registrants.

The National Membership Committee urged each state and local chapter to give serious consideration to making such changes as may be necessary in their constitution and by-laws to permit them to participate in the so-called "Texas Plan." This plan consists of presenting each graduate, who has passed the E-I-T examination, an introductory membership card good for the balance of the year. By this technique, the Texas Society has virtually doubled its E-I-T Membership. It is estimated that if the plan is adopted by the various States, that the Society can expect a probable addition of some 10,000 new E-I-T members.

Since the records from the various registration boards are not available before August, the actual cost is limited to the letters, magazines and mailing costs for the months of September through December. The experience of the Texas Society indicates that we can anticipate from 60 to 70 per cent will become active members and pay their dues the following year.

Professional Activities: The Professional Activities Committee Report was submitted by Past-President Alex Van Praag covering: (1) AIEE Functional Plan for Organization of the Engineering Profession as proposed by its President Coover, and (2) The Question of Membership of NSPE in the Engineers Joint Council.

(1) The Coover Plan has previously been discussed at length and very ably explained by Douglas Spicer in the October issue of the ILLINOIS ENGINEER. In brief, Dr. Coover recommended that NSPE "provide the medium for the general promotion of the professional aspects of engineering in the eyes of the public and be instrumental in the consequent enhancement of the economic status of the engineers." He further recommended that NSPE be the unity organization so far as professional activities are concerned, and that NSPE open its membership to include qualified members of the profession whose work does not, by law, require registration.

(2) The Committee made no recommendation for action at this time regarding application for member-

ship in Engineers Joint Council.

The Professional Activities Committee recommended that:

(a) The AIEE Plan be approved in principle with the exception of the recommendation regarding inclusion of the members without registration. Further, that when the constituent societies of ECPD and EJC approve the plan and implement its provisions, that NSPE then adopt the Plan.

(b) Membership requirements at the National level remain unchanged at this time.

(c) The several State societies seek ways and means of admitting qualified persons to membership and take such steps as may be necessary in their respective States to attain this objective.

The recommendations of the Committee were unanimously adopted by the Board.

Constitution and By-Laws: The Constitution and By-Laws Committee recommended that a constitutional amendment be submitted to the membership changing Article V, Section 1, by inserting "\$20.00" in place of "\$10.00" for per annum dues for the National Member, and under by-laws, that the permissible dues at this time be raised from \$10.00 to \$13.00. If the amendment is adopted, it would mean that the maximum allowable dues to NSPE would be \$20.00, and under the by-laws, it would be limited for the present to \$13.00, meaning a net increase of \$3.00.

The recommendation was unanimously adopted.

It was pointed out that increasing membership means increasing obligations. As the Society expands, and its activities increase, costs necessarily are also higher. The Society is also caught in the inflationary trend.

Student Chapters: A very lengthy and full report was made by the Student Chapter Committee. Ohio leads in the number of student members and student chapters, having over 800 student members and eight chapters. Texas is second with a total of 417 members and four chapters. Nine states have student chapters and steps are presently being taken to organize chapters in 11 additional universities. A definite procedure has been established for the organization and operation of student chapters and it was the consensus of opinion that this activity should be expanded and given even assistance by the State societies.

Functional Section for Engineers in Government: Director Leonard White of Arkansas called a meeting on Friday of engineers employed by government units. A Functional Section for Engineers in Government Practice was organized, with Mr. White elected as Chairman, and six vice-chairmen, one from each NSPE Administrative Area. The writer was elected vice-chairman from the Central Section. Rules and Procedures were adopted in conformity with By-Laws of the constitution and on Saturday the organization of the Section was approved by the Board.

Functional Sections

In an organization such as the ISPE, the membership composed of men whose interests may be quite varied. They have united in a common interest, the engineering profession, so that they may carry more weight in society.

To be an effective force in presenting its objectives, opinions, and ideals to the general public, a professional group must be able to speak for a majority of its members. By its affiliation with other state societies in the ISPE, the ISPE presents such an effective force.

Many specific problems arise that may be of interest only to a small portion of the membership and are not easily handled within the framework of the entire group. To handle these problems, functional groups at all levels—national, state, and local—composed of engineers with similar employment and interests have been organized within the larger membership. These groups are able to focus attention on their special interests and have the force of the full membership behind them.

Although the entire group may not have a direct interest in the individual problems, they should stand ready to lend their support to their fellow engineers in finding solutions to the problems. With the backing of

a large group, the small functional groups can obtain action not readily available to them otherwise. The smaller groups cannot have sufficient strength to make themselves heard alone.

Three such functional sections have been organized within the ISPE; they are the Highway Section, Industrial Section, and Private Practice Section. In time other sections may be formed to satisfy the needs of other groups.

The Highway Section is composed of engineers from the various highway departments, consulting firms, contractors, suppliers, and educational institutions interested in highway engineering. The group is now busy setting up a long-range program of its aims and purposes.

Engineers employed in industry compose the Industrial Section and are planning sections at the chapter level to promote their aims. Among the purposes of the group will be determination of ways to better utilize engineers in industry, to strengthen opportunities for professional growth, to increase opportunities for service to the Society, and to serve the community.

(Continued on Page 10)

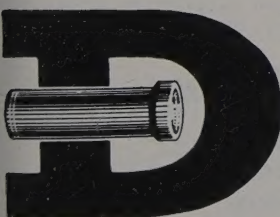


Clay sewer pipe, from the W. S. Dickey Clay Mfg. Co. was installed in 1894 for San Antonio sewers. Line was relocated in 1956 with more Dickey Pipe.

Life begins at 62 for Dickey Pipe in San Antonio

Dickey Vitrified Clay Sewer Pipe— in 8" diameter—was installed on Concho Street, San Antonio in October, 1894. This line gave 62 years of uninterrupted service. Twenty feet of the line was relocated and replaced with more Dickey Pipe. Balance of the 400 ft. line remains in service. Even after 62 years of heavy usage, the original Dickey Clay Pipe is as good as the day it was originally installed—unaffected by years of corrosive wastes it has carried. When you plan your municipal sewers, always specify chemically inert pipe that serves today and tomorrow with equal efficiency — Dickey Salt-Glazed Vitrified Clay Sewer Pipe.

Providing improved sanitation for better living



DICKEY sanitary salt-glazed clay pipe

W. S. DICKEY CLAY MFG. CO.

Birmingham, Ala. Chattanooga, Tenn. Kansas City, Mo. Meridian, Miss.
St. Louis, Mo. San Antonio, Tex. Texarkana, Tex.-Ark.

If it's made of clay it's good... if it's made by Dickey it's better

FUNCTIONAL SECTIONS (Cont'd)

The Private Practice Section will deal with the problems of the consulting engineers. Such items as competitive bidding, ethics within the group, taxes, and relations with the public will be under consideration.

During functional section meetings held at the 73rd annual meeting of ISPE in Decatur in April, the following officers of the sections were elected:

- Highway Section

Kenneth E. Welton	Chairman
Norman H. Gundrum	Vice Chairman
I. C. Bliss	Vice Chairman
Harold R. Absher	Vice Chairman
Gilbert Henning	Vice Chairman
Ellis Danner	Vice Chairman
Floyd Birt	Vice Chairman
Noel Thomas	Secretary-Treasurer
F. E. Peterson	Ass't Secretary-Treasurer
- Industrial Section

Royce Johnson	Chairman
Oscar Johnson	Vice Chairman
Manuel Garcia	Secretary-Treasurer
Roger Ericson	Section Representative
- Private Practice Section

J. D. Voorhees	Chairman
C. N. Debes	Vice Chairman
Paul Gawrusik	Secretary-Treasurer
John Housiaux	Committeeman
Howard Verduin	Committeeman

State Water Survey

The first comprehensive report in 50 years on the mineral quality of major Illinois streams was published last month by the Illinois State Water Survey, a division of the Department of Registration and Education.

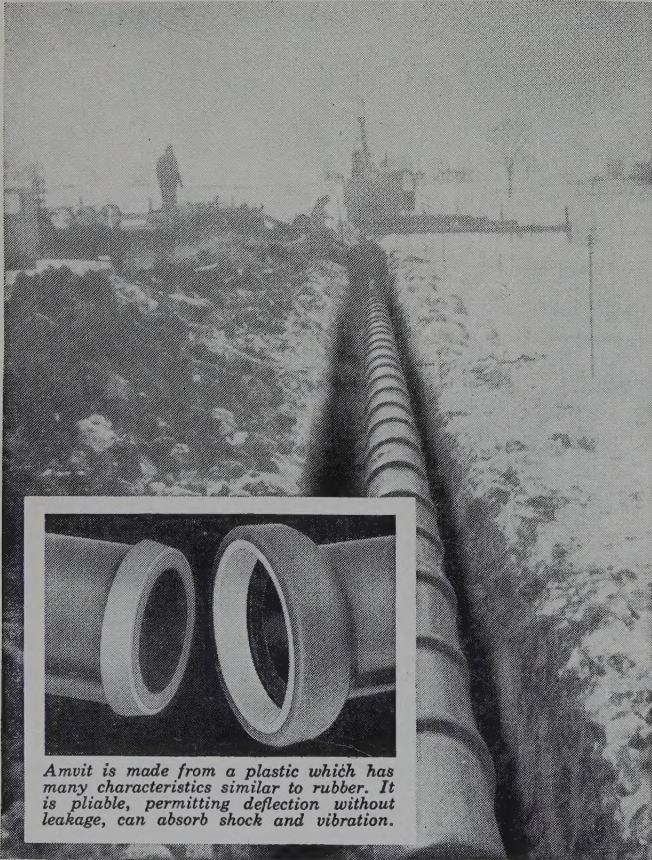
Entitled "Quality of Surface Waters in Illinois," the report was written by Dr. T. E. Larson, head of the Survey's chemistry section, and Brent O. Larson of the University of Illinois engineering department.

Samples of water were analyzed from 19 different streams and Crab Orchard Lake over a ten-year period.

Several features distinguish this report from previous studies. Significance of the minerals with respect to the soils found on the watersheds of the various streams is discussed. Sampling points were selected to provide a network including the different soil areas of the state.

Occurrence of certain minerals in Illinois waters related to the various uses of water is also presented for example: the presence of iron which results in the condition known as "red water," fluorides which have aroused considerable interest with respect to dental caries, or boron which affects water used for irrigation.

Another unusual feature of the study is the use of probability charts for each sampling point. These charts show the frequency of occurrence of different amounts of turbidity, hardness, alkalinity, total dissolved minerals, as well as data on the temperature and average daily stream flow.



Amvit is made from a plastic which has many characteristics similar to rubber. It is pliable, permitting deflection without leakage, can absorb shock and vibration.

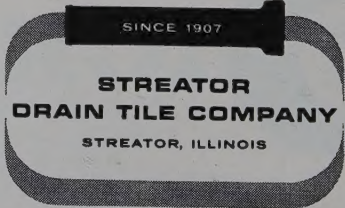
Streator's NEW PLASTIC Amvit
jointed clay pipe chosen
for Monroe, Wisconsin, sanitary system

Outstanding mechanical joint on
Streator Clay Pipe one of city's lifelines

Streator's new plastic jointed clay pipe gives decades of uninterrupted underground service. Neither the joint nor the pipe is affected by chemical attack, erosion, decomposition, rodents, and termites. The line is root proof and controls infiltration.

STOP Root Trouble. Insist on Streator Clay Pipe with the new plastic joint. Low cost, trouble free, the joint is on the pipe delivered to the job from Streator's nearby modern plant. Located just a short distance from your project, Streator gives you better values and service on both large sizes and small diameter clay pipe.

For more information, see your supplier or write or call Streator Drain Tile Company, Streator, Illinois.



Dear Fellow Member:

From the chart on the next page, you will see that we have at least overcome inertia and our 1958-1959 membership campaign is on its way. Obviously, we have not gained momentum. The start is good, however, so with a reasonable progression, we will attain our goal.

To inspire each of you into an effort to help build our Society, we hope to make personal contact with each member. To accomplish this, each chapter is in the process of dividing its membership into teams over which a Team Captain will be appointed. The Team Captains will report to Chapter Membership Committee Chairmen who will in turn report to the State Committee. You should hear from your Team Captain soon.

Don't wait until your Team Captain contacts you. Get a new member signed up this month. ***If only 170 of our members obtained one application a month we would reach our goal.*** If you don't hear from your Team Captain soon, ask your Chapter Membership Chairman or your Chapter President who he is.

The cooperation of each member is vital to the success of this program.

Can we count on you?

**Have you started to carry an application
blank in your pocket for ready use?**

Let's all get on the band wagon, even if it's only for the ride, but please don't drag your feet.

YOUR MEMBERSHIP COMMITTEE

MEMBERSHIP CAMPAIGN PROGRESS

HONOR
ROLL

140

120

100

80

60

40

20

0

CHAPTER

AMBRAW

Dewey R. Conner Jr.

CAPITAL

Marcus J. Rice

CENTRAL ILLINOIS

Lawrence C. Auby

CHAMPAIGN

George L. Sodemann

CHICAGO

Charles Zanzie

DU KANE

Donald S. Magowan

EGYPTIAN

ILLINOIS VALLEY

James J. McNally

JOLIET

Bernard Anderhous

LAKE COUNTY

John C. Broecker

MADISON COUNTY

Clifford F. Abraham

PEORIA AREA

Thomas N. Landes

ROCKFORD

Roger K. Ericson

ROCK RIVER

Ralph C. Davis

ST. CLAIR

E.W. Markwardt

WEST CENTRAL

Charles R. Roberts

Watch

this

list

grow.

Be

sure

your

name

is

included.

THE FIRST FIVE

CHICAGO

DUKANE

CHAMPAIGN

JOLIET

EGYPTION

ILLINOIS SOCIETY

500

1000

1500

2000

NSPE AND ISPE

offer REGISTERED PROFESSIONAL ENGINEERS

- 1 **MEMBERSHIP** in the only active, established organization devoting its entire effort to the professional, ethical, economic and social aspects of engineering.
- 2 **AFFILIATION** with the only national society composed exclusively of registered engineers from all branches of the profession.
- 3 **A SINGLE, POWERFUL VOICE** which speaks for a cross-section of the engineering profession.
- 4 **PERSONAL PARTICIPATION** in its overall program for the advancement of professional ideals and concepts.
- 5 **A CAMPAIGN FOR PUBLIC RECOGNITION** of the profession's contributions to national progress and welfare.
- 6 **A CONSTRUCTIVE PROGRAM** designed to raise the economic and social status of professional engineers.
- 7 **CONTINUOUS ACTION** to improve registration laws and their administration.
- 8 **STANDARDS OF PROFESSIONAL CONDUCT** through its Canons of Ethics and continuous interpretation of this code in terms of current practices within the profession.
- 9 **PROTECTION** of the profession and the public against misrepresentation in engineering practices by those not qualified.
- 10 **AN OPPORTUNITY FOR YOU** to contribute suggestions and exchange ideas with members of all branches of engineering for the good of the profession.
- 11 **A PROGRAM** designed to offer the student engineer more adequate preparation for professional life.
- 12 **CONSTANT EFFORT** with the military to insure maximum utilization of the engineer in time of national emergency.
- 13 **AN OPPORTUNITY** to assist young engineers in meeting professional problems.
- 14 **ON-THE-SPOT REPRESENTATION** in national, state and local matters affecting the welfare of engineers.
- 15 **UP-TO-THE-MINUTE REPORTS** on legislative and legal events with which the profession is concerned.
- 16 **AN ORGANIZATION** to foster and stimulate engineering leadership in public service activities on a community, state and national level.
- 17 **SUBSCRIPTIONS** to national, state, and other publications as a part of membership dues.

ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Inc.
817 Myers Building, Springfield, Illinois

Date

To the Board of Direction of the
Illinois Society of Professional Engineers:

I hereby apply for admission to the Society as a
National, State, E-I-T, or Student
member. If admitted, I agree to comply with the terms of the Constitution
and the Code of Ethics of the Society, and wish to be enrolled in the
..... Chapter.

FOR OFFICE USE ONLY

Appl'n Recd.
Amount Enc.
Ref. Written.....
Ref. Recd. 1..... 2..... 3.....
Presented to Bd.
Elected.....
Notified.....

I. ALL APPLICANTS complete the following ten spaces:

1. Full Name.....Name of Spouse.....
Last First Middle CHECK PREFERRED MAILING ADDRESS
2. Residential Address.....Phone.....
Street City State
3. Business Affiliation.....Position.....
4. Business Address.....Phone.....
Street City State
5. Registration.....Reg. Number.....
(Type of Certificate: Prof. Eng., Struct., etc. State Issued)
6. Engineering Field.....
(Civil, Electrical, Mechanical, etc.)
7. Technical Society Affiliations and Grade of Membership.....
8. Birth.....Date.....Place.....Age.....Sex.....
9. Education.....Years.....School.....Date of Graduation.....Degree Obtained.....
10. Recommended by.....Signature

II. If you are NOT REGISTERED as a professional engineer, structural engineer or an E-I-T, complete the balance of the application form.

Names, addresses, and professional connections of three persons who may be consulted concerning my qualifications (preferably professional engineers who are members of this Society; action will be expedited accompanying this application with the letters of reference).

1.Name.....Title.....Address.....Member NSPE-ISPE
2.
3.

Draft of Proposed Constitution and By-Laws for Review by Membership

To the Members of ISPE:

The following is a draft of a new proposed Constitution and By-Laws for ISPE. This proposed Constitution and By-Laws is not presented for adoption at this time. It is presented so that all members of ISPE may look it over and make suggestions. At a later date it will be presented to the membership for adoption incorporating suggestions made by the membership. We hope that the members find the following to be easily adaptable in keeping with the working and growth of a prosperous society. Many changeable details have been removed from the Constitution to the By-Laws. The By-Laws may be amended by the Board of Directors of the Society without having to go to the members. Improved administration, particularly with regard to committee activities, is an enabling factor that should allow appropriate action to be taken as needed. It is hoped that this and other changes make the governing instrument more workable for day to day operation of the Society.

Please send all comment and suggestions to

Constitution and By-Laws Committee
Illinois Society of Professional Engineers
817 Myers Building
Springfield, Illinois

Constitution and By-Laws Committee

R. D. Collins, Chairman

J. R. Gardner

L. D. Hudson

A. C. Kessell

J. H. Morgan

ARTICLE I—NAME

Section 1. The name of this organization shall be "The Illinois Society of Professional Engineers," hereinafter called the Society.

Section 2. The Society shall be incorporated as a non-profit organization under the laws of the State of Illinois.

Section 3. The Society shall be a member State Society of the National Society of Professional Engineers, hereinafter called the National Society.

ARTICLE II—OBJECTIVES

Section 1. The objectives of this Society shall be:

- Advancement of the public welfare.
- Advancement of the professional, social and economic welfare of the Professional Engineer and the Engineer-in-Training.
- Promotion of high standards of engineering education.
- Maintenance of high ethical engineering conduct and practices.

ARTICLE III—MEMBERSHIP

Section 1. Membership of the Society shall consist of Corporate and Non-Corporate Members.

- Corporate members shall consist of National, State, Honorary and Life members.
- Non-Corporate members shall consist of Engineers-in-Training, Students, Affiliates and Junior Mem-

bers. The classification of Junior Member shall cease and reference to it eliminated from this Constitution on October 1, 1961.

Section 2. Membership classifications are defined as follows:

- A **National Member** shall be either,
 - A person holding a valid license or certificate of registration as a Professional Engineer issued by the lawfully constituted registration board of any state; or
 - A Registered Structural Engineer in the State of Illinois.
- An **Engineer-in-Training** member shall be:
 - A person holding a valid certificate of registration as an Engineer-in-Training issued by the lawfully constituted registration board of any state, or
 - A person who has completed a four-year curriculum leading to a bachelor's degree in engineering from an accredited college of engineering and is employed at some form of work connected with the practice of professional engineering, or
 - A person who, in the opinion of the Board of Directors, possesses qualifications equivalent to those set forth in (2) hereof except as to formal education, who has been employed in some form of work connected with the practice of professional engineering for at least four years and who declares his intention to prepare for accomplish registration.
- A **State Member** shall be a person who qualifies under one of the following categories:
 - Is a non-resident of the State of Illinois who holds membership in the National Society through membership in another State Society.
 - Is a registered land surveyor in Illinois.
 - Was admitted to this classification prior to January 1, 1959.
- A **Student Member** shall be a person who is pursuing a full time engineering curriculum in an accredited college.
- An **Affiliate Member** shall be a person who was admitted to this classification prior to January 1, 1959, or shall be a person who has attained a position in his special pursuit qualifying him to co-operate with engineers in the advancement of professional knowledge and practice, but who is not eligible to be a Corporate Member. An Affiliate at the time of his admission shall:
 - Be not less than 35 years of age.
 - Have been engaged in his special pursuit not less than 12 years.
 - Have had responsible charge of important work for not less than 5 years.Affiliate Members in any Chapter shall not exceed 10% of the total Corporate members of that Chapter. Where present Chapter Affiliate Members exceed this percentage, no new Affiliate Members may be added until the above restriction can be complied with.
- A **Junior** shall be a person who was admitted to this classification prior to October 1, 1951.

Section 3. All National Members and Engineer-in-Training Members shall be members of the National Society.

Section 4. Only Corporate Members shall be eligible to vote in the Society.

Section 5. After ten years of membership an Engineer-in-Training Member or a Junior must transfer to the grade of National Member, or Affiliate, or be dropped.

Section 6. A National Member or a State Member who has attained eminence in the engineering profession or related sciences may be designated as an **Honorary Member** as provided in the By-Laws.

Section 7. A National Member or a State Member may be designated as a **Life Member**, upon approval of the Board as provided in the By-Laws, provided he has (1) retired from active practice, and (2) has been a National or State Member of the Society for 20 years or more, and (3) has submitted a written request to the Board requesting transfer to Life Member.

Section 8. Membership admission or expulsion procedures shall be governed by the By-Laws.

ARTICLE IV—OBLIGATIONS AND PRIVILEGES

Section 1. All members shall adhere to the code of ethics of the Society and the canons of ethics for engineers adopted by the National Society.

Section 2. National Members, who are residents of Illinois, shall have the exclusive right to serve as officers of the Society or as Members of the Board of Direction of the Society or National Society, or as officers of any Chapter, except that Engineer-in-Training Members and State Members may hold the Chapter offices of Secretary or Treasurer or Secretary-Treasurer.

Section 3. All members of the Society, Corporate and Non-Corporate, shall have the right to vote in the Chapters and to serve on Society and Chapter Committees. All members of the Society, Corporate and Non-Corporate, except Affiliates, shall be allowed to display the insignia of the Society.

ARTICLE V—DUES

Section 1. The dues of members in the Society shall be as stated in the By-Laws, and shall become due and payable on January 1 of each year.

Section 2. A member whose dues are in arrears, without satisfactory explanation, for 18 months shall be dropped from the Society.

ARTICLE VI—ADMINISTRATION

Section 1. The Society shall be administered by a Board of Direction hereinafter called the Board. Within the provisions of this Constitution the Board shall have the full authority and power of the Society between annual meetings.

Section 2. The Board shall consist of the President, the Vice President, the Secretary, the Treasurer, the latest living available Past President, the National Directors representing this Society on the National Board of Direction, the Chairman of the Representatives from this Society to the Illinois Engineering Council (so long as such council exists), and Representatives from each Chapter determined as follows:

- a. One representative from each Chapter.
- b. One additional representative from each Chapter having between 101 and 300 inclusive Corporate Members.
- c. One additional representative from each Chapter having between 301 and 500 inclusive Corporate Members.
- d. One additional representative from each Chapter having between 501 and 700 inclusive Corporate Members.
- e. One additional representative from each Chapter having between 701 and 900 inclusive Corporate Members.

Section 3. Each Chapter shall be entitled to one vote for each Chapter Representative and any one or more Representatives may cast the votes for the Chapter.

Section 4. The Chairman of the Representatives from this Society to the Illinois Engineering Council shall be an appointee of the Board.

Section 5. A majority of the Board Members shall constitute a quorum.

ARTICLE VII—OFFICERS

Section 1. The officers of the Society shall be the **President**, the **Vice President**, the **Secretary**, the **Treasurer** and together with the **National Directors** shall be elected annually by letter ballot as follows:

- a. The President and the Vice President shall be elected for a term of one year beginning at the close of the annual meeting.
- b. The Secretary and Treasurer shall be elected for a term of two years with the Secretary being elected in even numbered years and the Treasurer elected in odd numbered years.
- c. The National Directors shall be elected for three year terms.
- d. In the first election following the adoption of this Constitution the Secretary shall be elected for a one year term, the Treasurer for a two year term, one National Director for a one year term, one National Director for a two year term and one National Director for a three year term. Thereafter all officers shall be elected in accordance with a and c above.

Section 2. To be eligible for nomination, election or retention of an elective office of the Society or as a Chapter Representative a member shall be in good standing and a resident of the State of Illinois. No member may hold two positions on the Board simultaneously.

Section 3. The Treasurer shall be bonded as determined by the Board.

Section 4. No member of the Board shall receive a salary or compensation except for expenses incurred in behalf of the Society as approved by the Board.

Section 5. Fees and expenses of persons serving the Society shall be allowed at the discretion of the Board.

Section 6. In the event the office of President becomes vacant the President is unable to serve, the Vice President shall become President for the unexpired term. All other vacancies in the elective offices, including the National Directors, shall be filled for the unexpired term by appointment by the Board.

Section 7. Duties of the officers shall be as defined in the By-Laws.

ARTICLE VIII—NOMINATION AND ELECTION OF OFFICERS

Section 1. The Nominating Committee shall be as defined in the By-Laws.

Section 2. Nominations shall be made for each elective office and no member of the Nominating Committee shall be eligible for nomination by the committee.

Section 3. Nomination and election procedures shall be carried out in accordance with the provisions of the By-Laws.

Section 4. Nominations by petitions must be accompanied by the written consent of the Nominee or Nominees.

ARTICLE IX—CHAPTERS

Section 1. The membership of the Society may be organized into chapters as authorized by the Board. Each Chapter thus formed shall have a minimum of ten National Members.

Section 2. The Board shall have authority to make rules and regulations for chartering, combining or dissolving Chapters.

Section 3. Each Chapter shall elect representatives and alternates to the Board of Direction as provided in Article VI of this Constitution. The term of office of the Chapter Representatives shall be two years or less. Where a Chapter has two or more representatives on the Board, their terms shall be staggered so that all terms will not expire at the same time.

Section 4. Each Chapter shall adopt a Constitution and By-Laws for its operation as it may deem proper, provided however, that nothing contained therein shall conflict with or contravene the Constitution and By-Laws of the Society. Chapter Constitution, By-Laws and proposed amendments thereto shall be submitted to the Board of Direction for approval.

Section 5. A Chapter shall hold at least four meetings per year. A copy of the minutes of every meeting, shall be submitted promptly to Society Headquarters.

Section 6. The charter of a Chapter may be revoked when activities of the Chapter are not conducted in accordance with the Constitution or with the Constitution of the Chapter.

ARTICLE X—FUNCTIONAL SECTIONS

Section 1. The Board of Direction may authorize the establishment of functional sections, comprising members having common professional problems and interests, to operate under the Constitution and By-Laws of the Society.

Section 2. The scope of activities and the sphere of interest of such section as set forth in the Functional Sections Constitution and By-Laws shall be submitted to the Board of Direction for approval.

ARTICLE XI—COMMITTEES

Section 1. Administrative Committees, standing committees and special committees shall be appointed by the President for the approval of the Board.

Section 2. The duties of the Administrative and standing committees shall be as defined in the By-Laws.

ARTICLE XII—HEADQUARTERS

Section 1. The location of the headquarters of this Society shall be determined by the Board.

ARTICLE XIII—BY-LAWS

Section 1. The Board shall adopt By-Laws which shall govern the procedures under this Constitution including those of the Board and of the committees.

Section 2. The By-Laws may be amended by an affirmative vote of not less than two-thirds of all members of the Board, provided however, that the text of a proposed amendment shall be furnished to each member of the Board and to the President and Secretary of each Chapter at least thirty (30) days before the meeting at which a vote on the amendment will be taken.

ARTICLE XIV—AMENDMENTS

Section 1. Amendments to this Constitution may be proposed by a majority of the Board or by a petition signed by not less than one hundred (100) Corporate Members of this Society.

Section 2. Proposed amendments to the Constitution shall be submitted together with a letter ballot to each voting member at the time ballots are submitted for the Annual Election.

Section 3. An amendment shall be adopted only upon affirmative vote of two-thirds of the votes cast by the Corporate members, provided not less than 25% of the Corporate Members cast affirmative ballots.

ARTICLE XV—EFFECTIVE DATE

Section 1. This constitution shall supersede the present Constitution as revised September 1, 1957 and shall become effective on its adoption by the voting members of the Society.



R. Dean Collins, chairman of the Constitution and By-Laws Committee. Dean, a member of the Capital Chapter, is a partner in the consulting firm of Hanson, Collins and Rice, consultants in Springfield.

By-Laws**BY-LAW I—ANNUAL MEETING**

A. The annual meeting of the Society shall be held at the time and place determined by the Board and it shall be officially announced to the members at least six months preceding the meeting.

BY-LAW II—DUES

A. Annual dues shall be as follows:

- (1) National Member—National dues plus \$10.00 State dues and \$5.00 Chapter dues.
- (2) Engineer-in-Training Member—NSPE Junior Member dues plus \$6.00 State dues.
- (3) State Member—\$10.00 State dues plus \$5.00 Chapter dues.
- (4) Student—\$2.00 State dues.
- (5) Affiliate—\$20.00 State dues plus \$5.00 Chapter dues.
- (6) Junior—\$10.00 State dues.
- (7) Honorary and Life Members—No State dues.

B. Dues shall be payable annually in advance on January 1 to State Headquarters office. Chapter dues shall be disbursed quarterly by the State office to the Chapters to which the payers belong, the quarters ending January 31, April 30, July 31, and October 31.

C. Persons admitted to the Society between December 1 and June 30 inclusive shall pay full year's dues. Persons admitted between July 1 and November 30 inclusive shall pay a half year's dues.

D. Each member is obligated to pay all dues until he has resigned or been expelled, or has been excused from payment by the Board.

E. A person shall be considered in good standing if his dues are remitted prior to the close of December 31, of the year for which such remittance is due, unless otherwise ruled by the Board.

BY-LAW III—NOMINATION AND ELECTION PROCEDURES

A. The nominating committee shall be named six months prior to the annual meeting.

B. The nominating committee shall file its report with the Secretary five months prior to the annual meeting. Nominations by petition shall be filed with the Secretary four months prior to the annual meeting.

C. Letter ballots with envelopes for returning marked ballots shall be mailed not later than three months before the annual meeting to all corporate members. Provisions shall be made on the ballot for write-in candidates for each office to be filled.

D. In order to be valid, ballots shall be returned to the Secretary in two sealed envelopes. The outer envelope shall be endorsed by the voters signature. A voter may withdraw his ballot and substitute another any time before the polls close.

E. The polls shall close at 12:00 noon on the eighth Monday preceding the annual meeting. The ballots shall be counted by not less than three tellers appointed by the President. The candidate receiving the largest number of votes shall be declared elected. In case of a tie for any office the Corporate Members attending the annual meeting shall elect the officer from the persons so tied.

F. The regular term of office of a Chapter Representative shall be two years and shall extend from the close of one annual meeting to the close of the second following annual meeting of the Society, provided that when a chapter is organized its first representative shall be elected for a term of two years or less as the Board of Direction shall specify.

BY-LAW IV—ADMISSION & EXPULSION

A. Candidates for admission to or transfer in grade in the Society may be elected either by the Board of Direction or by Chapters, in accordance with the provisions following:

B. Chapters may admit to the Society as a National Member any person who holds a valid certificate of registration permitting him to practice professional or structural engineering and who resides within the area of the Chapter's jurisdiction. Only members of the Chapters who are Corporate Members of the Society may vote on the admission of such applicants.

C. Every application for admission or transfer in grade other than those covered by B. shall be submitted to the Secretary of

the Society and by him to the Board of Direction, who shall have sole power to admit the applicant and to assign his grade of membership.

D. Candidates for admission or transfer in grade shall make application in writing on a printed form provided by the Society. Applications for National membership by candidates holding a valid certificate permitting them to practice professional or structural engineering and residing within the jurisdiction of a Chapter may be submitted to the Secretary of such Chapter. All other applications shall be submitted to the Secretary of the Society.

E. Every application submitted to a Chapter Secretary in accordance with the provisions of D. shall be submitted to an Investigating Committee of the Chapter consisting of not less than three National Members and appointed by the Chapter President with the approval of the Chapter Executive Committee. The Investigating Committee shall investigate the qualifications of each such applicant. If the Committee approves the applicant, the application shall be submitted to the Corporate Members of the Chapter for letter ballot. If the Committee disapproves the applicant, they shall submit the application, together with their recommendations in writing, to the Chapter Executive Committee, who shall either reject the applicant or submit the application to the Corporate Members of the Chapter for letter ballot. The applicant shall be admitted by such ballot unless ten per cent or more of the Corporate Members of the Chapter vote against his admission. All applications approved by the Chapters shall be forwarded, together with the proper dues, to the Secretary of the Society, who shall send the membership cards of such newly elected members to the Secretaries of the respective Chapters.

F. Names of candidates for honorary membership may be proposed either by the Board of Direction or by written petition to the Board, signed by not less than 100 Corporate Members. Names of candidates approved by the Board shall be submitted to the Corporate membership for election by letter ballot. Favorable votes of $\frac{2}{3}$ of the members voting shall be required for election, however, to be elected, ballots shall have been received from at least 10% of the Corporate Members.

G. A person who has been dropped from the Society because of delinquent dues may be readmitted by the Board of Direction, subject to payment of any fees required by the National Society.

H. The Board of Direction shall consider the expulsion of a person belonging to the Society and if circumstances appear to warrant action, the Board shall prepare confidential charges and shall submit them to the person. He may present a defense, either in person or in writing, to the Board of Direction at a meeting of which he shall receive due notice. Affirmative votes of two-thirds of the members of the Board present and voting shall be required to expel. If three-fourths of the Executive Committee of a Chapter recommend to the Board of Direction of the Society the expulsion of a person belonging to the Chapter, or if the State Committee on Ethics and Practice recommends to the Board the expulsion of a person belonging to the Society, the Board must proceed in accordance with the above provisions of this section. In case of expulsion the Board shall notify the person and the Society.

BY-LAW V—DUTIES OF OFFICERS

A. The President, Vice President, Secretary, and Treasurer shall perform the duties usually pertaining to their offices. The President shall preside as Chairman and with approval of the Board shall appoint the Committees on Budget and Finance, Ethics and Practices, Fees and Salaries, Nominating and such other committees as the Board may deem necessary.

B. The Vice President shall preside as Chairman in the absence of the President. He shall also serve as Chairman of the Budget and Finance Committee.

C. The Secretary shall be the liaison officer between the Board and the Executive Secretary. He shall also be custodian of the property of the Society and shall deliver it to his successor. He shall present a report at the annual business meeting of the Society on the affairs of the Secretary's office; he shall assure the proper recordings of the proceedings and discussions of the Annual Meeting, meetings of the Board of Direction and Executive Committee and shall check to assure that copies of them are prepared and distributed to the Board. He shall be ex officio librarian of the Society and as such shall collect and preserve all books, pamphlets, papers and documents belonging to the Society.

D. The Treasurer shall serve as Comptroller of the Society and as such shall countersign all checks for expenditures budgeted and approved by the Board of Direction. He shall be responsible for the accounts of the financial affairs of the Society and shall present an annual report of all receipts and disbursements at the annual meeting of the Society.

E. The Directors from this Society to NSPE and the Chairmen of the Representatives from this Society to the Illinois Engineering Council shall represent the ISPE to those organizations and they shall reflect the views of the ISPE as expressed by the ISPE Board.

BY-LAW VI—DUTIES AND RESPONSIBILITIES OF THE EXECUTIVE SECRETARY

A. An executive secretary may be retained by the Board of Direction as a full time employee of the Society.

The duties of the executive secretary are as follows:

- (1) Manage the ISPE state office and conduct the routine business of the Society.
- (2) Manage the business affairs of the ILLINOIS ENGINEER, a monthly publication. Solicit articles, items of interest, and advertising for the magazine.
- (3) Supervise one or more assistants who are expected to perform the routine duties.
- (4) Develop programs of action, both within the Society and outside, which may be to the interest and welfare of the Society. This includes the development of programs for obtaining new members.
- (5) Coordinate the activities of local chapters and committees of the state organization.
- (6) Call attention of the proper officers, committee members and other members affected by the actions and requests of the National Society on the one hand and the state chapters on the other.
- (7) Present talks before various organizations explaining the broad field of professional engineering.
- (8) Call on industrialists, public utilities, executives and other large employers of engineers to promote their interest and participation of their engineers in ISPE affairs.
- (9) Prepare articles, leaflets, and other literature expounding ISPE-NSPE principles.
- (10) Work with legislators, insofar as possible, so as to make the voice of the professional engineer to the record bills that are of interest mutually to the public and the professional engineer.
- (11) Participate in the promotion of various educational and public relations activities such as Engineers' Week, fresher courses, vocational counseling, professional development and professional unity.
- (12) Arrange all details for meetings of the executive committee and the Board of Direction of the state society.
- (13) Record and distribute the minutes of meetings of the Board and the Executive Committee.
- (14) Maintain adequate records on other subjects.
- (15) Assist officers in performing their duties.

BY-LAW VII—BUSINESS PROCEDURE

A. All meetings of the Society shall be governed by "Robert's Rules of Order Revised."

B. The order of business shall be fixed by the Board of Direction.

BY-LAW VIII—COMMITTEES

A. Administrative Committees

The following administrative committees of the Society shall be appointed by the President with the approval of the Board.

(1) Executive Committee

The Executive Committee shall consist of the President as chairman, and members as follows: the lastest available past president, the vice president, the secretary, the treasurer, one national director, and two assistants to the president who are selected from among the Board members. The Executive Committee shall administer the business of the Society between Board meetings. Actions of the Executive Committee must be submitted to the next Board meeting for approval.

(2) *Honors and Awards Committee*

The Honors and Awards Committee shall have not less than 5 members including a past president, a present or past national director, a current member of the Board of Direction, and two members each from different chapters. This committee shall act as adviser to the Board and to the chapters in establishing and administering honors and awards programs.

The Honors and Awards Committee shall recommend for approval of the Board:

- a. Candidates for consideration as honorary members.
- b. Candidates for receipt of the Illinois Award.
- c. Candidates for honors or awards approved by the Board.

(3) *Nominating Committee*

The Nominating Committee for the election of Society officers and representatives shall consist of not less than seven (7) National Members. One member shall be a past president of the Society, two members shall be members of the Board and not less than four additional members shall be officers of different Chapters. All members of the Nominating Committee shall be from different chapters. The President shall instruct the committee of the offices to be filled.

3. **Standing Committees**

- (1) Standing committees of the Society shall be organized under Professional, Public Relations, and Operations groups with the vice president or an assistant to the president as the administrative head of each group. The following standing committees of the Society shall be appointed, with power to appoint subcommittees, by the president with the approval of the Board.

<i>Professional Group</i>	<i>Public Relations Group</i>	<i>Operations Group</i>
Education	Building & construction codes	Budget and Finance
Employment practices	Civil defense	Chapter activities
Ethics and practice	Inter-Professional relations	Constitution & By-Laws
Fees and salaries	Publications	Functional sections
Legislation	Public Relations Resolutions	Membership
Young Engineers		

- (2) Appointments shall be made for 3-year terms except initial appointments may be made for 1, 2, or 3 years in order to provide appointments in approximately equal numbers to any one committee each year.
- (3) Duties common to all standing committees shall include:
 - a. Preparation of interim and annual reports.
 - b. Submission of all policy matters for approval of the Board before implementation of procedures recommended by the Committee.
- (4) The following outline of duties shall serve as a guide for individual committees:

C. **Professional Group**(1) *Education Committee*

The Education Committee shall

- a. Develop and sponsor programs to improve teaching of mathematics and the physical sciences as well as general subjects in the secondary schools.
- b. Promote projects for counselling effectively students indicating interest in engineering.
- c. Cooperate with engineering colleges in promoting professional concepts among engineering students, including establishments of student chapters where the opportunity exists.
- d. Encourage superior graduates of engineering colleges to pursue graduate study in engineering.
- e. Promote higher standards for engineering colleges.

(2) *Employment Practices Committee*

The Employment Practices Committee shall

- a. Study procedures and policies governing employment of professional engineers and make recommendations.
- b. Study inter-relationships of state and federal laws governing labor relations and the employment of professional engineers.

- c. Advise the legislation committee on pending legislation affecting employment practices and labor relations.
- d. Study existing and future supply of and demand for professional engineers.
- e. Cooperate with other professions and other engineering organizations in improving employment practices for professional engineers.

(3) *Ethics and Practice Committee*

The Ethics and Practice Committee shall

- a. Recommend means to improve ethical standards within the profession.
- b. Recommend means to improve and protect economic and professional interests of the engineer.
- c. Investigate and recommend to the Board disciplinary action for members of the Society who have violated the codes of ethics of the state or the national society.
- d. Investigate and recommend action to the Board in cases of violation of legislative acts of the state regulating the practice of professional engineering, structural engineering or land surveying.

(4) *Fees and Salaries Committee*

The Fees and Salaries Committee shall

- a. Prepare fee and salary schedules for guidance of the members of the Society.
- b. Seek new and better methods for establishing charges for engineering services.
- c. Clarify for both client and engineer the detailed services to be provided by the engineer for the fees included in the engineering services contract.

(5) *Legislation Committee*

The Legislation Committee shall

- a. Study legislation affecting registration laws covering the practice of professional engineering, structural engineering and land surveying.
- b. Recommend support for legislation at the local and state levels which will enhance the professional standing of the engineer.
- c. Cooperate with other professions and with other engineering organizations in recommending support for or opposition to measures of mutual interest.
- d. Draft, initiate and sponsor legislation desired by the members and the Board of Direction of ISPE.

(6) *Young Engineers Committee*

The Young Engineers Committee shall

- a. Encourage and assist young engineers to develop professionally.
- b. Initiate special studies of problems facing young engineers.
- c. Recommend policies and actions which reflect the attitude of young engineers.

D. **Public Relations Group**(1) *Building and Construction Codes Committee*

The Building and Construction Codes Committee shall

- a. Cooperate with other professional organizations in development of building and construction codes.
- b. Make recommendations for approval or disapproval of pending codes.
- c. Serve as advisers to local governments in interpretation and enforcement of building ordinances.

(2) *Civil Defense Committee*

The Civil Defense Committee shall

- a. Encourage, aid, and cooperate with other professional organizations in developing procedures and standards for adoption at the local and state levels.
- b. Study and encourage the utilization of professional engineers in appropriate positions in the civil defense organization.

(3) *Inter-Professional Relations Committee*

The Inter-Professional Relations Committee shall

- a. Promote cooperation among professional engineers, structural engineers, architects, contractors and other professions.
- b. Promote better understanding and cooperation among engineering societies.

(4) *Publications Committee*

The Publications Committee shall

- a. Exercise general direction over the publication, editorial and advertising policies of the ILLINOIS ENGINEER.
- b. Serve as consultant and adviser to officers and committees in planning, financing and editing all publications issued by the Society.

(5) *Public Relations Committee*

The Public Relations Committee shall

- a. Plan and conduct a continuing campaign through all recognized media to cultivate a better understanding of the engineering profession.
- b. Plan and conduct special programs during National Engineers' Week.
- c. Establish a speaker's bureau and promote talks by Society members.
- d. Promote appointments of professional engineers to public commissions and other organizations.

(6) *Resolutions Committee*

The Resolutions Committee shall

- a. Initiate, study, and recommend appropriate action on subjects of concern to the state society.
- b. Serve as adviser on resolutions submitted to the Board of Direction by the Chapters.

E. Operations Group(1) *Budget and Finance Committee*

The Budget and Finance Committee shall

- a. Prepare a budget for control of expenditures and money by the state society.
- b. Review from time to time expenditures being made and compare these with approved budget.
- c. Study the financial structure of the Society and recommend ways and means for improving the financial condition of the Society.

- d. The Budget and Finance Committee shall consist of the Vice President as Chairman ex-officio, the President, the Treasurer, and one other member of the Board of Direction. This Committee shall prepare an annual budget which shall be presented for consideration by the Board of Direction prior to the beginning of each fiscal year and shall recommend revisions to the adopted budget when and as necessary. It shall advise the Board of Direction otherwise concerning the Finances of the Society. It shall be responsible for the audit of the books of the Treasurer and shall report thereon to the Society at its annual business meeting.

(2) *Chapter Activities Committee*

The Chapter Activities Committee shall

- a. Encourage and assist chapters to undertake projects of interest to the state society as well as to individual chapters.
- b. Initiate, help to establish, and encourage new chapters.

(3) *Constitution and By-Laws Committee*

The Constitution and By-Laws Committee shall

- a. Maintain a continuing study of the constitution and by-laws and application of their provisions.
- b. Study carefully suggestions for revision and submit recommendations to the Board.
- c. Serve in an advisory capacity to the officers and committees of the Society in interpreting the provisions of the constitution and by-laws.
- d. Recommend specific specialized studies of the constitution and by-laws when deemed desirable.

(4) *Functional Sections Committee*

The Functional Sections Committee shall

- a. Initiate, help to establish, and encourage new functional sections.
- b. Serve as adviser to functional sections.

(5) *Membership Committee*

The Membership Committee shall

- a. Promote ISPE before the entire profession in order to enlist endorsements, support and affiliation.
- b. Initiate, develop, and conduct membership campaigns.
- c. Cooperate with and advise chapters and their membership committees on effective methods for increasing membership.

F. Other Committee Appointments

The President shall appoint all other committees that may be required or desirable. Members of all committees shall be in good standing in the Society at the time of their appointment.

BY-LAW IX—AMENDMENTS

Section 1. Amendments to this Constitution may be proposed by a majority of the Board or by a petition signed by not less than one hundred (100) Corporate Members of this Society.

Section 2. Proposed amendments to the Constitution shall be submitted together with a letter ballot to each voting member at the time ballots are submitted for the Annual Election.

Section 3. An amendment shall be adopted only upon affirmative vote of two-thirds of the votes cast by the Corporate members, provided not less than 25% of the Corporate Members cast affirmative ballots.

Lake County Chapter News

Bill Collins was elected Chapter Representative to complete the unexpired term of the late U. C. Neyer.

Program Committee Chairman, William Maki, assisted by Cliff Anderson, Art Ball and John Horne arranged a ladies' night on June 28. Dinner was held at the Kungsholm, Scandinavian Restaurant on Rush Street in Chicago, and followed by a night at the opera.

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Central Illinois Chapter News

John E. Housiaux reports that the May meeting of Central Illinois Chapter was attended by 70 members and guests. The meeting was devoted to entertaining 25 high school senior students and their faculty representatives. The student guests represented each of five Decatur area high schools. A general interest program dealing with bridges and the construction of the Miracle Bridge of Mackinac was presented. Other activities included the presentation of Mathematics Awards to senior high school students. These awards are made to a senior student in each high school in recognition of scholastic excellence in high school mathematics and to encourage the study of math by gifted high school students. The student to receive the award is selected by the high school faculty. Each award consists of a certificate and a pocket slide rule. Awards were made at the annual high school Awards Programs as follows:

Harry L. Smith, Stephen Decatur High
 Richard C. Brewer, MacArthur High
 John L. Schudel, St. Teresa High
 Ronald Carmean, Lakeview High
 James D. Foster, Eisenhower High

Presentations were made for the society by members of Chapter's Education and Professional Development Committee.

Harry L. Smith also received the \$1,000 Mississippi

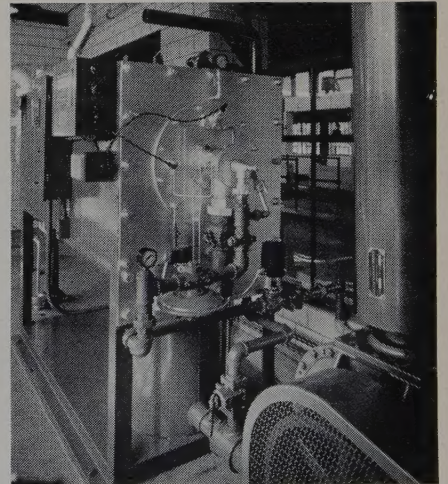
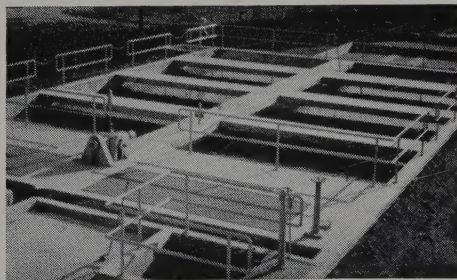
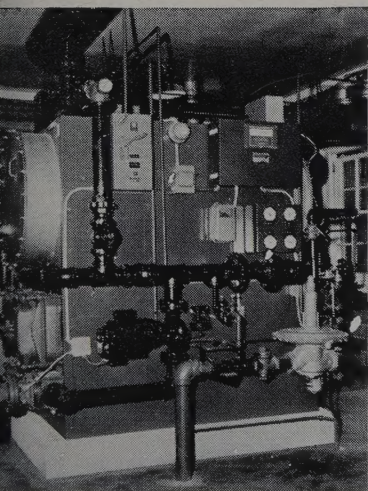


Central Illinois Representative John E. Housiaux presenting The Mathematics Award from the Central Illinois Chapter to Richard L. Brewer of MacArthur High School.

Valley Structural Steel Company's Engineering Scholarship from Parke Boyer (N '52) during the Stephen Decatur Awards Day Program.

The June business meeting was held on the 19th at the Elks Club. The program will be presented by the Cadillac Plastic Company of Chicago and included exhibits, demonstrations and discussion of engineering applications of plastic products.

WALKER PROCESS engineers and manufacturers of equipment for . . . water, waste and sewage treatment

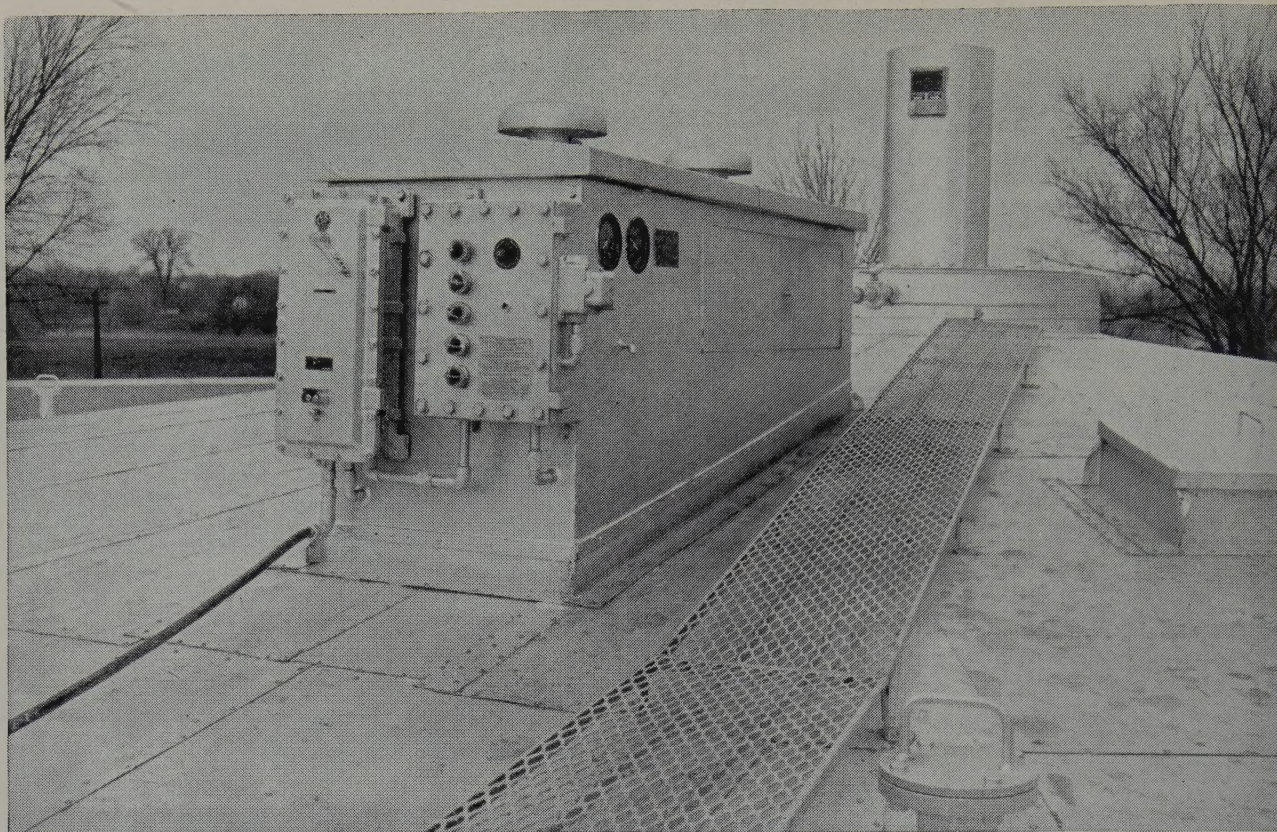


Some of the Walker Process installations in Illinois:
 Left—HEATX, digester sludge heater at Urbana-Champaign; Wilson & Anderson, Consulting Engrs.
 Top—Rectangular Collectors at Morris; Baxter & Woodman, Consulting Engrs.
 Right—CARBALL, CO₂ producer at Moline; Greeley & Hanson, Consulting Engrs.

Walker Process offers laboratory, engineering and manufacturing facilities to assist the consulting engineer and his clients in all problems regarding process equipment for the

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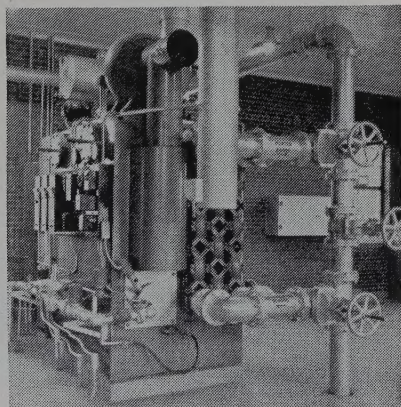
WALKER PROCESS EQUIPMENT INC. • Aurora, Illinois



This P.F.T.-Pearth Gas Recirculation System mounted on a 70' P.F.T. Floating Cover is part of the new "controlled digestion" system just added to the Decatur, Illinois sewage treatment plant. Design of plant by Warren & Van Praag, Consulting Engineers, Decatur.

Decatur, Illinois installs complete modern P.F.T. "Controlled Digestion" system

Unusual industrial and population growth has called for the modernization and expansion of Decatur's sewage treatment plant three times in recent years. Each time Decatur has selected P.F.T. equipment.



Decatur's new P.F.T. No. 750 Gas Fired Heater and Heat Exchanger, with accessory group B, controls, provides full automatic digester temperature control.

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The P.F.T.-Pearth gas recirculation system includes a gas compressor rated to deliver 150 cfm at 10 psi powered with a 10 hp motor. Controls are provided to automatically discharge to each of 4 peripheral discharge wells in sequence.

The wells are equally spaced around the cover extending to a depth of approximately 10 feet below the liquid level in the tank. The compressor and low and high pressure bypass controls are mounted on the floating cover in an insulated housing.

P.F.T.-Pearth gas recirculation provides the most effective means of controlling scum formations. This allows the use of the full Digester capacity. Combined with close temperature control with a P.F.T. Heater, rapid and complete digestion is assured. Decatur's new "controlled digestion" system is now geared to meet the needs of this fast growing community.

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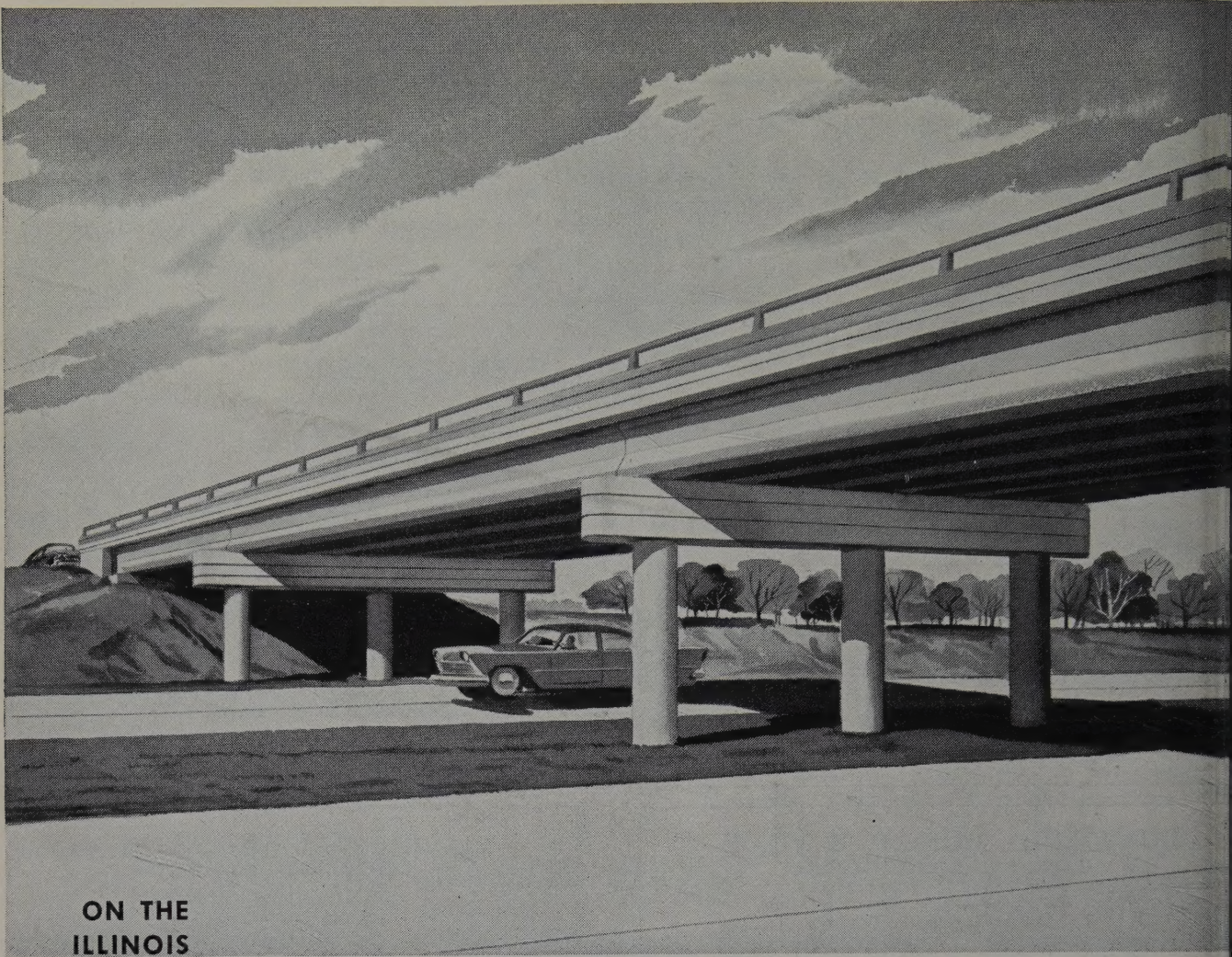
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WHEN AMERICA BUILDS FOR ECONOMY...IT BUILDS WITH CONCRETE



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TOLL
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A full-scale test bridge showed engineers new ways to cut costs. 218 more prestressed bridges will follow . . . at savings that make every fifth bridge free!

Engineers found big economy when they checked prestressed concrete for bridges on Illinois Toll Highways. They're cutting approximately \$4,000,000 from original estimated costs—with no sacrifice of strength or durability.

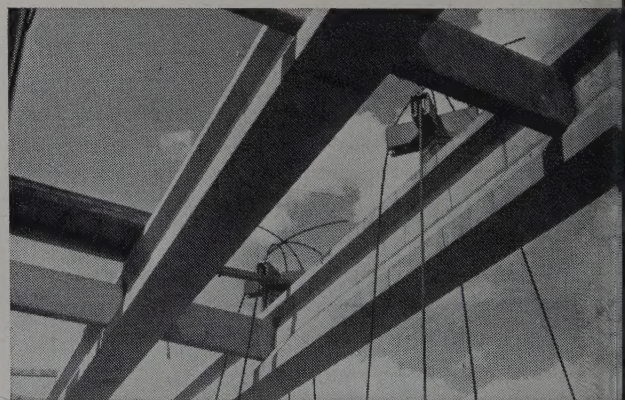
This is a mass production job, the biggest yet of its kind. Designs are standardized. Prestressed stringers are being produced in casting yards to achieve top economy and uniformly high quality. All this enables contractors to meet road opening schedules with resultant financing economies.

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